***My Smart-Phone can monitor my health too?!?***

**DEBATE**



Not only can your smart-phone let you watch your favourite Twilight movie or let you talk face-to-face with your long lost cousin in Spain – within minutes, it can monitor your heart and breathing rates too! Researchers at Worcester Polytechnic Institute have developed a new smart-phone app that can take your pulse and measure your breathing simply by detecting subtle changes in your skin colour as you hold an index finger over the video camera. The app seems to work on the earlobe too, so the phone can obtain a reading at the same time as you’re chatting about the latest gossip at school. Researchers have found that the app is just as accurate as standard measuring tools such as electrocardiographs and pulse oximeters. Furthermore, in addition to allowing people to keep a daily record of their heart and respiratory rates, the app may also be able to identify patients with atrial fibrillation.

Image and information obtained from *Technology Review* article: <http://www.technologyreview.com/biomedicine/38868/?ref=rss>

**TASK:** In groups of 3-4, you will debate the following statement:

***“People should be encouraged to use Smart phones to regulate their heart and respiratory rates”*.**

You will be assigned as “for” or “against”.

**Step 1: Choose your perspective.**

Each person on your team must represent a specific group of people in society that would have an interest in this topic. Example of roles: physician, senior citizen, smart-phone company marketer, etc. You will debate from this perspective.

**Step 2: Research**

Research the topic and inform yourself about all perspectives relating to it. Brainstorm your own ideas about the topic. You will get in class time to do this.

**Step 3: Prepare your argumentative speech.**

Your speech should convince the judge of your stance. It should be 2-3 minutes in length. A written copy is to be submitted on the date of the debate. It is important that your speech shows that you have applied your knowledge from this unit about the cardiovascular and respiratory system-- to the debate topic.

**Step 4: Opening and Closing Statement.**

Select who will give the opening and closing statements. The opening statement should introduce your team’s general view and the closing statement should summarize your main points.

**DEBATE DAY PROCESS:**

1. FOR Team: Opening Statement (1 min)
2. AGAINST Team: Opening Statement (1 min)
3. FOR Team: Person #1 Speech (2-3 min)
4. AGAINST Team: Person #1 Speech (2-3 min)
5. Alternate for remainder of speeches (2-3 min)
6. OPEN DEBATE: Starting with the For Team, teams will take turns debating what their opponents said. (5 min)
7. FOR Team: Closing Statement (1 min)
8. AGAINST Team: (1 min)

**RULES:**

1. Use respectful language.
2. No put-downs.
3. Only one person speaks at a time.
4. Please stand while speaking.
5. Follow judge’s and facilitator’s direction.

Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Team Members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**DEBATE RUBRIC**

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|  | **Level 1** | **Level 2** | **Level 3** | **Level 4** |
| **Knowledge/**  **Understanding** | demonstrates  limited  knowledge and understanding of  content | demonstrates  some  knowledge and understanding of  content | demonstrates  considerable  knowledge and understanding of  content | demonstrates  thorough  knowledge of  content |
| **Thinking/**  **Investigation** | uses critical/  creative thinking  processes, skills,  and strategies  with limited  effectiveness | uses critical/  creative thinking  processes, skills,  and strategies  with some  effectiveness | uses critical/  creative thinking  processes, skills,  and strategies  with considerable  effectiveness | uses critical/  creative thinking  processes, skills,  and strategies  with a high  degree of  effectiveness |
| **Communication** | communicates  to persuade audience with limited  effectiveness | communicates  to persuade audience with some  effectiveness | communicates  to persuade audience with considerable  effectiveness | communicates  to persuade audience with a  high degree of  effectiveness |
| **Application** | makes  connections  between science,  technology,  society, and the  environment with  limited  effectiveness | makes  connections  between science,  technology,  society, and the  environment with  some  effectiveness | makes  connections  between science,  technology,  society, and the  environment with  considerable  effectiveness | makes  connections  between science,  technology,  society, and the  environment with  a high degree of  effectiveness |

You will also prepare a self- and peer-evaluation.